



COMMUNICATING *Together*

A Quarterly Magazine Published by Blissymbolics
Communication Institute, Toronto, Ontario, Canada

Vol. 2, No. 4

December 1984



PHONIC EAR Vøis — HandiVoice and Blissymbolics **... Communicating Together!**



Phonic Ear and Blissymbolics have worked together to combine the best of two communication systems for non-speaking people!

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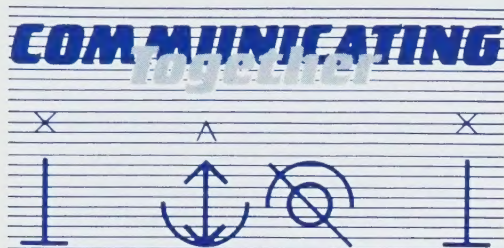
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Communicating Together is published quarterly as a means of sharing the experiences, systems and techniques of nonspeaking people with their families, communities and the professionals who work with them. Special attention is given to the nonreader's augmentative communication system and the role of Blissymbolics.

The Blissymbolics Communication Institute was established in 1975 to facilitate the use of Blissymbolics as a communication system for nonspeaking persons around the world.

BCI Affiliates and Information Centres are situated in

Canada: Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Ontario, Quebec

United States: Alabama, Florida, Massachusetts, Michigan, Minnesota, New York, Ohio, Pennsylvania, South Dakota, Vermont

Outside North America: Argentina, Australia, Belgium, Bermuda, Brazil, Denmark, Finland, France, Guam, Hungary, Iceland, India, Israel, Italy, New Zealand, Norway, Portugal, South Africa, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom, Venezuela, West Germany, Zimbabwe

Through BCI and its affiliates, over 8,000 instructors have been trained world wide.

Blissymbolics is a meaning-based, augmentative communication system offering vocabulary, structure and strategies to stimulate communication and cognitive development. It can benefit persons of all age and intellectual levels who have the potential and opportunity for interactive, functional communication. Blissymbolics can be used independently, with a variety of picture systems and technologies, or as a complement to words and spelling.

Blissymbols used herein are derived from the symbols described in the work *Semantography*, original copyright © C.K. Bliss, 1949.

September 1982, C.K. Bliss granted an exclusive, non-cancellable and perpetual, world-wide license to the Blissymbolics Communication Institute, for the application of Blissymbols, for use by handicapped persons and persons having communication, language and learning difficulties.

The symbol composition and drawings appearing in articles are in accordance with *Blissymbols for Use*, compiled and edited by Barbara Hehner, and published by the Blissymbolics Communication Institute, Toronto, 1980.

BCI is a member of the Canadian Rehabilitation Council for the Disabled (CRCDD).

John's Move To Independence

$$\lambda_J \xrightarrow{\wedge} \bigoplus_1^{\infty}$$

by David McNaughton

David McNaughton first met John Dowling when John was a Special Grade 1 student and David was in Grade 8 and a classroom volunteer in the Special Grade 1. Over the past year, they have shared many experiences through their common interest in computers, and during a trip to Ottawa on which David acted as John's attendant. Recently they were both members of a team that evaluated the Prentke Romich Minspeak.

John is a symbol consultant to the BCI and is applying to enter a vocational training program. David is about to begin his working career after having completed his Special Education Teacher training.

When Justin Clark won the right to determine his living arrangements, many Canadians recognized for the first time the desire of physically disabled adults to live independently and the obstacles in their way. One individual who has shown a willingness to face this challenge is John Dowling. After many months of planning, John is now living in his own one-bedroom apartment in the Caboto Terrace, a residential building for both seniors and the physically disabled. John's story is one of success. His determination, combined with the strong support of his friends and family have provided him with a solid base from which to explore his independence.

Born with cerebral palsy on December 30, 1963, John lived at home until he was 13. At that time, he moved to Bloorview, a residential setting for the physically disabled. While living at Bloorview, John was the first physically disabled student to attend the local public school. There was much about Bloorview that he enjoyed, especially the staff and the meals. "Everyone hated the food but me!" John laughs. But as adulthood approached, John developed a growing need for privacy and time to be with himself. This was often difficult in a busy facility like Bloorview.

Preparing for a New Life

In preparation for apartment living, John became involved with life skills training such as budgeting, comparison shopping, and "contracting for care" (outlining on a time chart the help needed from attendants). "Until recently people like John weren't accepted into apartments," notes Stephanie Hayes, John's speech pathologist. "A communicatively impaired person demands total care and needs a great deal of organization." At first John resisted some of the preparations for his new life, as he still wasn't sure whether he wanted to leave the security of Bloorview. Gradually John became more comfortable with the changes in his life. Finally after three years of searching and entering his name on many waiting lists, John selected the Caboto Terrace in Toronto.

Caboto Terrace is a senior citizens' residence from which 12 one-bedroom apartments have been subleased by the Participation Apartment Program. These apartments are then rented to physically disabled tenants, who are provided with attendant care services. Two aides are on duty at all times to assist in meal preparation, bathing and the dressing needs of these special tenants. The residents meet with the attendants to plan a "contract for care" that outlines when they will require assistance. Aides can also be called at any time by means of a telephone paging system. John especially likes the flexibility of this contracting system, as it allows him to plan days on which he will have a late supper or get up early to meet his sometimes hectic schedule.

Independent Living

The basis of any successful independent living program is the continuity of social relationships while adapting to new lifestyles. John has kept in contact with friends from Bloorview, school and other associations, as well as

receiving the strong support of his family. Stephanie Hayes notes, "John's greatest strength is his social ability to make contacts, to advocate for himself. He is friends with all his old teachers and classmates, and with just about everybody he has ever worked with!" This special quality is helping him develop a new and satisfying life in the community.

A Bloorview friend, Jeff Poss, often drops by to take John on short trips, and Murray Spence, a retired North York Board of Education consultant, is helping John to develop his cooking skills. Jeffrey, one of John's brothers, is another frequent visitor, and is a house guest in John's apartment on special weekends. His mother not only provides companionship and affection, but takes responsibility for supplying John with all of his groceries, as well as the furnishings that have helped to make his apartment a warm and comfortable home. Recently John hosted his first party, a gathering of friends to celebrate the retirement of a favorite teacher.

Still, as in all cases of independent living, there is concern as to whether John needs more involvement with the community. Murray Spence, who has supervised John's school program for over 12 years, pointed out, "While John's new life style has helped him develop a sense of independence and decision-making, he still needs to search out the social and recreational opportunities that are available in his new community. They are not going to be as prevalent as they were at a facility like Bloorview." Many of John's outings are work related. His friends at both the Blissymbolics Communication Institute and Bloorview keep him in touch with upcoming educational and vocational opportunities.

Involvement with Augmentative Communication

John's longtime association with Blissymbolics began with his parti-

icipation in the original pilot classroom in 1973, where he was one of the first ten children to use Blissymbolics as a communication system for the physically disabled. He also helped in the writing of *Symbol Secrets*, a Blissymbol book that told the story of his 1973 classmates. Since that time, his speech has improved to the point where he no longer needs to rely on the symbols, but he continues to perform important work for the BCI as a designer of new symbols and as an evaluator of communication technology.

Recently John was part of a team that evaluated the application of Blissymbolics with the Prentke Romich Minspeak. John created the sentences that were programmed into the Minspeak's memory, and attempted to use the Minspeak as his sole method of communication for a number of days. John's remarks about the device were videotaped for presentation at the ISAAC conference in Boston.

Over the past year, he has been very fortunate to have a home instructor tutoring him in word processing with the Apple II plus. Most recently John has begun a program that will introduce him to using his home computer for business applications. His instructors believe that he will be able to use his computer knowledge and problem solving abilities to do accounting work with his computer.

John's decision to live independently and his work with the Blissymbolics Institute has kept him a busy person in the past few years. He likes to refer to himself as a "happy guinea pig" for new technology, and jokingly complains that "I never know what is going to happen next!"

A New Lifestyle

Anyone who has ever left home to begin life on their own can understand the concern John must have felt in leaving Bloorview. In addition to the usual worries of losing old friends and confronting new situations, he has had to adapt to an independent lifestyle that takes into account his physical disability and communication difficulty.

On a recent train trip John and



John Dowling, in his apartment, shows off his collection of mugs.

his attendant encountered problems with the seating. After finally getting settled, all passengers (including John and his wheelchair) were forced to make an unscheduled transfer to a bus for the remainder of the trip. He maintained a positive attitude, however. Once he arrived home he used his computer to write Via Rail about his concerns regarding travel safety and the physically disabled. The Vice-President responded with an apology for the inconvenience and information on Via Rail's plans for improved Special Needs Service.

Although there must be many hours of loneliness living apart from companions and family, John has worked to keep in touch with those he cares about. His new phone has helped. "My phone allows me to reach people," he explained. "It would cut off my life if I didn't have it." He would like to return to Bloorview and share some of his experiences with the frustrations of living alone, and describe how his new apartment has truly become his home.

All of us who are involved with John know that it has taken the work of many to help him get this far. We also know that the emotional support given to John by those closest to him has been an essential component in his achievements. But most of all we know that John Dowling's warmth, ingenuity and determination have given him the strength to accomplish the goals that he has set for himself in his new life. □

Blissymbolics Independent Study Guide

The long awaited *Blissymbolics Independent Study Guide* will be available in January 1985. Instructors wishing to complete elementary training in Blissymbolics now have an alternative to attending a three-day workshop. With the *Study Guide* they can study in their own time and in their own way.

Included with the *Study Guide* will be a collection of monographs, a template and a set of BCI Training Vocabulary Stamps and grid.

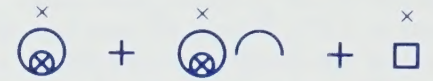
Used with *Teaching and Using Blissymbolics*, *Communicating with Blissymbolics*, and *Blissymbols For Use*, the *Study Guide* will lead the student through the course of study covered in a BCI Elementary Workshop.

Upon completion of the Independent Study Program, participants are eligible to write the examination to qualify for the Elementary Certificate in Blissymbolics.

The *Study Guide* will be available for purchase from BCI and its distributors in the United States, the United Kingdom and Australia.

For more information, write to: Blissymbolics Communication Institute, 350 Rumsey Road, Toronto, Ontario, Canada M4G 1R8.

Machines, Computers and Things



Microcomputer Applications Program, Ontario Crippled Children's Centre

by Fraser Shein

The Microcomputer Applications Program (MAP) at the Ontario Crippled Children's Centre (OCCC) was established in 1982 with support from the Max Bell Foundation for a three-year period. Additional support has since been received in the form of research and development grants. The main objective of MAP is to research, develop and implement applications of microcomputers for physically disabled children and young adults. Fraser Shein, coordinator of the MAP, writes the following account of the program's projects during the last two years.

Over the past several years, rehabilitation professionals have developed many ways to ensure that the new microcomputer technology is used to the benefit of disabled persons. At the Ontario Crippled Children's Centre, efforts in this area resulted in the establishment of a program that included applied research, product development and service. The departments most intensively involved have been those of Rehabilitation Engineering and the Augmentative Communication Service. MAP consists of an interdisciplinary team that includes expertise in rehabilitation engineering, computer science, therapy, augmentative communication, special education and psychology.

Accessing Assessments

One of the first major areas identified for attention was the effective control of microcomputers by severely physically disabled persons. An assessment procedure to aid in prescribing single-input control systems was undertaken. It incorporates both a systematic clinical assessment and a computer-based

(Apple II) evaluation of user-performance with a single-input control. This development is currently being extended to assessments for prescribing multiple-input control systems.

Dual-Computer Systems

The problem of providing physically disabled persons, who cannot use a conventional computer keyboard, with access to commercial software has been addressed by the MAP through the development of dual-computer systems in two projects.

A dual-computer system consists of one computer (back-end computer) which runs unmodified commercial software, and a second computer (front-end computer) which interprets the user's input. The front-end computer displays characters/words/symbols that can be scanned and selected. This part of the system can be customized for the individual. Selected items are transmitted via a cable to the back-end computer which interprets the items as though they were typed on its keyboard.

In a project for Health and Welfare Canada exploring creative applications of microcomputers by severely disabled persons, a dual-computer system has been developed. A creative outlet is being provided through the teaching and use of the programming language, Logo. In this case, the front-end computer runs a program designed by the MAP which displays Logo commands in Blissymbols or traditional orthography. Scanning and selection of the commands is achieved through 1-5 input control systems. The back-end computer running Logo then responds to the selected commands.

In the second project, MAP is developing a software cartridge for the National Research Council of Canada MOD Keyboard System. The MOD Keyboard is an inexpensive front-end system using the VIC-20 computer. MAP's version will be suited for the more severely dis-

abled users and for use in educational environments. It will feature a fully programmable display on which any character/word/phrase can be displayed anywhere on the screen and be given any meaning. Selection of items will be through scanning with 1, 2, 3 or 5 inputs. Multiple screen displays can be stored on the cartridge. This development will be completed by January 1985. Arrangements are being made to have the software and manual available in both English and French.

Classroom Activities

One class in the OCCC school that has six severely communicatively disabled children who use Blissymbols has been designated for attention by MAP. The purpose for working with this class is to identify and solve problems in implementing microcomputers in such a classroom. This includes examining issues related to software, hardware, accessing motor training, basic computer control skills, and the impact of this technology on both the children and teacher. It is expected that experiences gained here can be transferred to other classrooms with less severely involved children.

In order to provide an intensive teaching environment with the microcomputer, a computer instructor on the MAP staff provides daily instruction to the children. This has proven to be very effective at this stage allowing the instructor to focus attention on the skills being taught through the computer. Responsibility is, however, gradually being transferred to the teacher and the children are becoming better able to work independently.

Educational programs that are presently being utilized in the classroom include: Blissymbol, letter and number matching; spatial relationships; word recognition; language concepts; and PIC-MAN, a drawing program developed by MAP.

The Adaptive Firmware Card (Adaptive Peripherals, Seattle, Washington) has been used extensively with this class to provide access to commercially available educational software through a single-input control. It can display characters or words that are scanned and selected; it allows Morse code input, and also permits the attachment of a keyboard that can be defined with a character/concept layout appropriate for each student.

Software Developments

In addition to software being written for various research projects, the MAP has been developing a number of software packages. PIC-MAN, short for Picture-Man, is a program designed to give the control of drawing to a disabled person who is limited to single-input access to a computer. PIC-MAN provides the equivalent of giving a piece of paper and a handful of crayons to the person. Using an approach with concepts derived from Logo, drawing commands are displayed on the screen in the form of Blissymbols which can be selected by activating a single-switch to stop a moving cursor. It has been found that the use of PIC-MAN facilitates the development of problem-solving and organizational skills through immediate feedback and self-experimentation. MAP is distributing this program through the Blissymbolics Communication Institute, Toronto, Canada.

Programs presently under development include an easy-to-use LARGE TYPE talking word processor, and a program for teaching matching/sequencing of characters/words incorporating voice output and data collection. It is anticipated that future developments will focus on alternative accessing methods, special education and augmentative communication applications.

Information Sharing and Future Development

One of the rapidly growing facets of MAP has been its function as a resource centre with regard to microcomputers and handicapped persons. Monthly orientations to our activities and the overall

developments of microcomputers and handicapped persons have been provided, and two-day long workshops have been held. Future workshops are anticipated. MAP staff have also been involved in many conference presentations and invited lectures.

While significant progress has been made by the MAP and other rehabilitation teams, much development is still forthcoming. In particular, techniques of "real-time interactive communication" need to be refined. This is where a non-speaking person communicates without delays due to selecting or creating a message.

Portable microcomputers hold great promise for the future, since they will free users from limited work-station systems. Certainly, as the use of portables in the business world increases, parallel developments for physically disabled persons will also occur.

On a final note it is interesting to compare developments for the business executive with developments for the handicapped. While these user groups are at opposite ends of the spectrum, microcomputer developments, especially in terms of input techniques, are closely matched. □

Editor's Note:

Most of the MAP activities are documented and reprints are available. For more information contact:

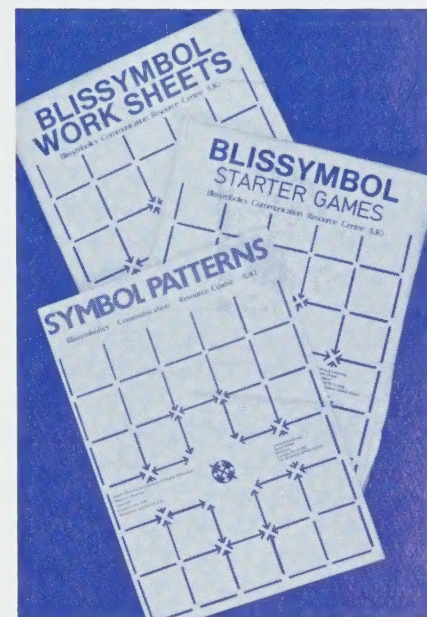
Fraser Shein, P.Eng., Coordinator,
Microcomputer Applications
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Children's Centre, 350 Rumsey
Road, Toronto, Ontario, Canada
M4G 1R8.

**This section of
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Canada,
Toronto, Ontario.**

Three Teaching Aids

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Communication
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Worksheets

50 worksheets divided into six sets. Designed to develop visuo-perceptual skills related to symbol recognition and shape differentiation.

\$14.00 plus shipping.

Game Starter Pack

Symbols on 11 card sheets arranged in groups of 14. Four copies of each sheet. Includes suggestions for games and other activities.

\$15.00 plus shipping.

Symbol Pattern Book

Contains large patterns shapes drawn on paper for all the basic shapes required to produce Blissymbols. Can be used as master patterns for sewing or for making wooden or foam symbols. Included is a pattern for symbol boy or girl cloth doll.

\$7.00 plus shipping.

Available in Canada from the Blissymbolics Communication Institute and in the U.S. from BCI Distributors. (See p.19.) Inquire for U.S. prices.

Typeset Blissymbols — A Computer Breakthrough

Have you noticed the symbols that have appeared in this and the last issue of *Communicating Together*? They have been typeset on our printer's computer typesetting machine. The importance of this particular computer breakthrough can only be realized at this time by BCI staff. In the future, we hope many Blissymbol users will come to know the value of this new technological capability. This is a breakthrough which opens up many new avenues for the use of Blissymbols in print.

History of the Project

About two years ago, our printers, Beacon Herald Fine Printing of Stratford, Ontario came to us with the idea of creating a font which could be used in their computer typesetting machine to produce Blissymbols. They had become interested in Blissymbols, through the various printing jobs they had done for us, and realized the inefficiency of inserting every Blissymbol by hand as artwork, each time we used one within text. It has always been a problem to produce the symbols in the required size for a particular article or publication. Either master symbol cards had to be enlarged or reduced to the correct size, a costly and time consuming photographic process, or someone had to draw the symbols using a template, not always a consistent process as different people and materials created slightly different final results. In either case, the final artwork was then inserted to the text in a cut-and-paste fashion.

Beacon Herald saw the potential for designing a computer program which would create from a predetermined set of shapes any symbol combination required in any size. They studied the work undertaken by the Trace Research and Development Center, Wisconsin, in producing *Blissapple* and analysed the symbols so presented in *Blissymbols for Use*. They then determined

which shapes and orientation of shapes would be necessary to produce any symbol combination in the Standard Blissymbol Vocabulary.

Following this, a funding proposal was prepared by BCI and submitted to the Kiwanis Club of Toronto. This group of businessmen, who have been so generous in the past, again gave support to BCI. Having funded the development of the *Independent Study Program* and *Communicating with Blissymbolics*, they realized a typesetting capability would greatly simplify the production procedure for both these publications.

Development

Once the basic shapes or building blocks were identified, each one was drafted accurately. The consultants worked hard to determine every possible orientation and position required for each building block. These master shapes were then sent to the manufacturer of the typesetting machine, where they were digitized onto computer disks. These disks were then returned to Stratford, where our friends there began the laborious job of writing a program to combine all the building blocks into the 1,600 symbols of the BCI Standard Vocabulary. Meticulous attention was given to how lines met and the spacing between symbol components. The consulting team spent hours checking all the symbols with a grid to guarantee as precise and accurate symbols as possible. Once a symbol was approved, the codes for its creation were locked into the program, to ensure identical reproductions each time a particular symbol was recalled.

New Uses for Typeset Symbols

We can now produce typeset symbols for a variety of uses.

(1) They can be used within text, as when we want to give an

example such as  in an article.

(2) When illustrating a point in a text or adding symbols to a library book, we can choose the size wanted.

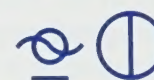
milk



milk



milk



(3) Customized displays can be produced for individual clients with symbol size and wording appropriate to their needs.

house



house



(4) The actual word or gloss that accompanies a symbol can be altered to provide the most relevant word for the symbol user.

grandmother granny grandma



(5) Symbols can be produced in reverse for those who relate more effectively to this.

(to) feel

funny



Future Applications

As we work with typeset symbols, many more applications of this technology will be suggested. Get in touch with us if you have some ideas, and we will explore their possibilities.

We are looking forward to the publishing this fall of the two new books *Independent Study Workbook* and *Communicating with Blissymbolics*, the revised handbook. Both these projects will feature typeset Blissymbols.

We are excited about this new technology. It has taken more than a year to bring to fruition. Our sincere thanks is extended to the Toronto Kiwanis Club for funding it and to the dedicated and patient team at Beacon Herald, headed by Lorne Bolton who persevered with the mechanical details of composing over 1,600 symbols to the standard we demanded. □

* * *

Computer Program News From BCI

BCI and its U.S. distributors now distribute two programs developed by the Microcomputer Applications Project (MAP) at the Ontario Crippled Children's Centre, Toronto, for use on the Apple II computer. Inquire with distributors for price.

Single-Input Control Assessment

- Designed to aid in assessing a disabled person's potential for using a single-input computer control.
- Three computer tasks are used to monitor performance.
- The program uses graphic design.
- Performance data is automatically stored on disk.

Pic-Man (short for Picture-Man)

- Designed to provide graphic drawing capability for single-input control users.
- Drawing commands are displayed in Blissymbols.
- Commands are scanned and then selected with a single switch or any computer key.
- Commands can be spoken while scanning and pictures can be saved and printed.
- Intended for use with Apple II Computer with 64K memory.
- Printing on a dot matrix is optional as is speaking with a Votrax or Intex Talker speech synthesizer.

Sharing Ideas With Nora

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"Sharing Ideas with Nora" is a forum for sharing information concerning all aspects of Augmentative Communication. Nora Rothschild, consultant with the Augmentative Communication Service of the Ontario Crippled Children's Centre, heads up a regular column focusing on readers' questions, answers, problems and experiences.

Dear Nora,

I am the Activity Co-ordinator at Crescent Park Lodge and we have several stroke victims in our Home. I am looking for the menu boards that are used for nonverbal people, as we are attempting to put together individually designed communication boards for our residents. I have seen these boards in the past and am aware of their convenience and versatility, but have no idea how to purchase them. I would appreciate it if you could forward this information to me.

Yours truly,
Mrs. Maggie Chambers
Activities Co-ordinator
Crescent Park Lodge
Hagey Avenue
Fort Erie, Ontario
L2A 5M5

Dear Mrs. Chambers,

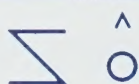
Thank you for your letter of enquiry regarding the menu boards. I am able to offer you several suggestions. Several different types and sizes of folders are available from the following distributors:

- The Blissymbolics Communication Institute, 350 Rumsey Road, Toronto, Ontario M4G 1R8.
- Don Johnston Developmental Equipment, 981 Winnetka Terrace, Lake Zurich, Illinois 60047.
- EBSCO Curriculum Materials, Div. EBSCO Industries Inc., Box 1943, Birmingham, Alabama 35202.

I am certain that similar folders are available from other sources. We obtain many of our folders directly from a menu manufacturer or restaurants. We also construct many of our boards to exact sizes by using bristol board, cardboard, photo matting or discarded game boards (eg., snakes & ladders). We then add our symbol/word/alphabet/picture items and encase them with "mac-tac" (a brand name for a type of clear, self-sticking shelf paper). In order to add or change items, we simply stick the additional items on and use a small square of mac-tac around the new item(s). One alternative to using mac-tac is to use a strong clear, plastic vinyl (e.g., such as the material used to cover desk pads) and enclose all outer seams with cloth book-binding tape. With these custom-made boards it is possible to add handles, folds, velcro or snaps.

I am sure that many readers have constructed similar boards. I suggest that if you have any additional ideas or tips on this topic or any other, please take a few minutes to share them by writing to me: Nora Rothschild, c/o *Communicating Together*.

Blissymbol Talk



This section focusses on the Blissymbolics system itself. For those already familiar with Blissymbolics, new symbols and new ways of looking at the system are introduced. For those new to the system, an introduction to standard Blissymbols is given, including new ways to use the symbols. The quiz is for everyone.

A Symbol Quiz

Given the "abstract" meaning for these symbols:

light life (to) measure



help

line



Find their "concrete" meanings:



(Answers on p. 23)

Symbol News

Blissapple segment codes (for *The Talking Blissapple* software) and Blisscii codes (for use with electronic devices) have been developed for all symbols added to the system between January 1983 and April 1984. Any reader who would like a copy of these codes should address their request to Claudia Wood, Symbol System Coordinator, BCI.

For New Symbol Users

Previous issues have discussed the use of indicators in the system of Blissymbolics. The last indicator to be introduced is the "thing" indicator.

Three Important Symbols:

thing

looks similar to the full sized symbol

enclosure



an outline of a crystal cube; it represents a material thing



pictograph: enclosed space.

In *Semantography*, C.K. Bliss wrote that every chemical thing is an enclosure in itself of which we see only the surface.

thing indicator



a quarter sized symbol placed above another symbol used to indicate something concrete.

BCI advocates the use of the thing indicator only when a symbol might have both an abstract and a concrete meaning.

Example:

feeling



abstract form of the "heart" symbol: traditionally one's concrete feelings are supposed to come from the heart.

heart



heart shape + thing indicator: an organ of the body, a concrete object.

time



pictograph: the symbol looks like a clock face.

clock



time + thing indicator: an object that tells time.

More New Blissymbols

flashlight



light + hand + thing indicator

shampoo



soap + hair + thing indicator

switch, plug



into + electricity + thing indicator

match



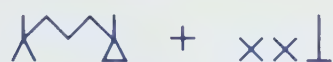
linear thing + fire + thing indicator + action indicator

candle



linear thing + fire + light + thing indicator

Family and Community



Summer Experiences

by Andrew and Mark



Andrew Murphy of Toronto has been communicating with Blissymbols for several years. In this column, appearing in each issue, Andrew and his father Mark share their experiences and those of other families with the special perspective of people who communicate in different ways.

This summer, I went to visit my aunt and uncle and cousins in Calgary, Alberta. My dad accompanied me on the plane to and from Calgary, but I was completely on my own during the week-long visit. This was the first time I was with someone who was not trained in Blissymbolics. Because my aunt and uncle took the time, I was able to communicate really well with my Blissymbols and eye pointing. Not once during the week was I frustrated or unable to express my thoughts. It was a terrific experience for me. I had a wonderful time (my aunt Susan is the greatest cook).

Among the many places we visited was the Dr. Gordon Townsend School in Calgary and I was able to meet the children that wrote to me through this magazine. It was fun

meeting kids you had received letters from. I talked to them with my Blissymbols, and they talked back to me with Blissymbols and the teacher as interpreter.

* * *

After I returned from my trip, I went to two different day camps. I went to the Sunnyview Day Camp which I had attended before and to a new one, "The Iron Butterflies", which was new to me. It was fun being busy and meeting new people and I am looking forward to the Iron Butterflies program that will take place on Friday evenings during the winter.

When I returned from my two weeks' stay at Blue Mountain Camp, we received a questionnaire requesting our comments on our camp experience. This was the first time they had done this. I was very pleased that they wanted our opinion and happy to answer all their questions on my own using Blissymbols. Even my mother was surprised at some of my answers because nobody had asked the questions before.

The things I liked best about camp were (1) the counsellors, who

were very kind and pleasant, and (2) being outdoors so much. The things I liked least about camp were (1) too much boring Indian stuff and (2) no field trips away from camp. It really felt great being able to express my opinion to people in charge of activities that affect me. I hope enough of the kids answer and that changes are made for next year. I always look forward to camp and enjoy it so much so that if they can make it better, it will be an even better time for all of us.

Now, it's back to school and another year of learning and working on the computer. I am going to spend a lot of time working on the computer at school and at home when we get our computer. I am also going to spend time learning to read. What are you doing this year? Please write and let me know so that we can share our experiences in *Communicating Together*. □

Editor's Note:

Interested readers please write to: Andrew Murphy, 29 Kellythorne Drive, Don Mills, Ontario, Canada M3A 2L5.



Andrew visiting a class at the Dr. Gordon Townsend School, Calgary, Alberta.

Computers for Nonspeakers

by Paula Nelson

Paula Nelson is the mother of Tim Dooley for whom a customized electronic communication system has been developed and coordinated by Dr. John Eulenberg, Director of the Artificial Language Laboratory at Michigan State University. (See Communicating Together, Vol. 2, No. 3, September 1984). In this article, she tells the story of how this communication system came to be.

Until two years ago I had no interest in computers. It never occurred to me that this technology would invade my world, and give my son the opportunity to live a full and rewarding life.

Getting Acquainted With Computers

My education started with a TV program on the series "NOVA" called "Finding A Voice". I saw men who could not speak, communicating with the help of computers. Through those devices they were given the opportunity to go to college, get jobs, do research, and order pizzas by phone. They were given the power to compete in society.

My son, Tim Dooley, was seven years old then. Born with cerebral palsy and consequent lack of speech, I considered him a brother to the pioneering men I saw on TV. At that time, Tim was learning to use a motorized wheelchair, and communicated mostly with personalized sign language and a word-board. Although he could use a Handivoice 110 to communicate with kids in his class who could not read his wordboard, he used it seldom.

I knew the importance of giving him an effective communication tool if he was going to get the education he deserved. He is a bright boy, but resistance had started on the part of public school teachers, who did not know how to handle a child they couldn't understand.

Having no clear idea of what to do, I took a chance and called the man on "NOVA" who was responsible for creating voices for people who could not speak. Dr. John Eulenberg is head of the Artificial Language Laboratory at Michigan State University and he said he was glad I called. He encouraged me to learn as much as I could about speech technology.

I attended my first conference on computers and the disabled in July of 1982 in Madison, Wisconsin. It was there I was introduced to the wonderful world of computers. When I shook hands with Dr. Eulenberg at the close of the conference, we agreed to work together to build a voice for Tim.

First I bought an Apple II Plus with an Echo voice synthesizer and started to learn how to use it. I needed to know how computers work, so I could understand what Dr. Eulenberg was doing. I hired a high school boy to work with Tim at the computer once a week. Then we visited the Lab at Michigan State University for an evaluation and met the dedicated team there. We saw voice output communication systems in various stages of completion, and Tim got to use them himself. Tim became a research assistant then, and continues to give us advice about what he expects his system to do.

The Tim Dooley System

The Tim Dooley System, when it is completed, will be wheelchair portable. The computer will be attached to the back of his wheelchair, and will be powered from the same batteries that run the chair. There will be a LED display mounted to the wheelchair. Instead of entering information from a keyboard, Tim will use a joystick mounted between his knees. The joystick will be used to scan pages of information that appear on the screen and further to select items within a page.

He can print short messages on a small, mounted strip pointer, or he can hook up to a regular printer for letters or schoolwork. He can also attach it to another computer to utilize other programs or games, or to save information to disk.



Tim Dooley with his new communication system.

Dr. Eulenberg hopes to use a boy's voice in Tim's system. The system is capable of unlimited vocabulary and will utilize various methods of encoding words, phrases and sentences to make speech as rapid as possible. It will incorporate sound effects and singing.

Other Computer Systems

While the Tim Dooley System is being built, Tim is using another portable computerized voice output communication aid that Dr. Eulenberg has provided. He added a voice to the Radio Shack Model 100 portable computer. Tim can type whatever he wishes to say through the keyboard, and get voice output with unlimited vocabulary. But it takes Tim a long time to type, and he makes a lot of errors. So I attached a wooden rod to the computer to stabilize Tim's hand, and Dr. Eulenberg wrote two programs to speed up speech. The first program allows Tim to use just two or three keystrokes to say entire words or phrases. The second lets Tim use one keystroke to accomplish speech. Tim and I can both easily enter the desired text, and change it when necessary.

Another valuable program Dr. Eulenberg put in the Model 100 is an archive. It stores all of Tim's utterances by date and time. The archive can be reviewed in order to see which vocabulary words Tim uses most, how long it takes him to enter a word, or where his spelling is weak. It allows us to plan what to encode, and to assess his language skills. The storing into the

archive can be disabled easily for privacy. There are other attributes of the Model 100 which are a great help to both Tim and to his teachers at school. He can now see and hear words as he types them, and this has improved his spelling and language skills. We can create text files for schoolwork and homework, putting assignments in and having Tim complete them. They can be easily printed out on my printer at home. We all send notes back and forth via the computer, sharing our excitement as we discover new applications together.

Another feature of the Model 100 is its built-in modem, a device that allows computers to talk to each other through the telephone. I use it for several purposes. When Dr. Eulenberg writes a program for Tim on his Model 100 in Lansing, Michigan, he can load it directly into Tim's Model 100, a thousand miles away from Woodstock, New York. In a few minutes, we can use it here. We also use the modem to keep in touch with the Lab and with other people interested in augmentative communication on a teleconferencing system called CONFER. It is a lot faster and easier to contact busy people by leaving messages that can be read immediately after signing on to the teleconference. I also joined a Handicapped Users Database on Compuserve, a public national database. Through it, I can keep up to date on aids for the handicapped, conferences, read certain periodicals for the handicapped, and meet handicapped users for interchange of ideas.

We are grateful to the many people who have been generous with their time and wisdom during the course of this project. The Tim Dooley System masterminded by Dr. Eulenberg is the result of an international collaboration amongst men and women of varying disciplines whose common interest is the concept of dignity, embodied in the principle of the right of speech. □

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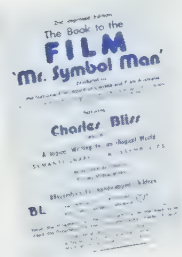
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Perspective



Bruce Baker Talks About Minspeak

by Sarah Swartz

Bruce Baker, a theoretical linguist, is the designer of Minspeak, a microprocessor-based coding system. He has taught widely in the United States and France and is currently consulting linguist for the Prentke Romich Company. He is also Contributing Editor for Communication Outlook.

With extensive background in esoteric linguistic studies such as classical philology (as Baker puts it, the study of half obliterated inscriptions on Roman monuments), Bruce Baker decided to use his linguistic expertise towards a more humanly useful goal. The result is Minspeak, a new augmentative communication device.

Baker's interest in augmentative communication began with his research on prejudice towards the physically disabled. As he conducted interviews with his cerebral palsied subjects, most of whom required communication aids, he became painfully aware of the two greatest drawbacks for nonspeaking people using aids: the slowness and the inconclusiveness of their communication. Most communication aids, Baker found, were based on letters, words or phonemes. People had to spell out their thoughts letter by letter or word by word.

As the realities of physical communication disorders became apparent to him, Baker decided to focus his work on a means of facilitating nonvocal communication in a faster and more efficient manner. The solution, as Baker saw it, was in a semantic system based on meaning and logical concepts, rather than on letters and words. Wedding this idea to microcomputer technology, Baker began his development of Minspeak.

After his initial work on the project had begun, Baker contacted

Rick Creech, himself an augmentative communicator, who had a reputation for being a whiz on the keyboard. Creech's advice and his in-depth fieldtesting became such valuable feedback for the project that Baker invited Creech to become a partner in Minspeak. Baker says, "Rick's encouragement allowed me to continue my work. Rick told me that the system had great power and could revolutionize the lives of many people."

Today Minspeak forms an important part of Rick's communication. He has used Minspeak within his university training and is now a partner in Minspeak Corporation.

Explaining Minspeak

Minspeak has been available since February 1984 and is being distributed by Prentke Romich Company. It is the first semantically based communication aid to come on the market. The system presently consists of a keyboard, a microprocessor with storage and retrieval, a thermal line printer and a voice synthesizer.

Minspeak stands for "minimum effort speech" and is what Baker refers to as a semantic compaction system. It uses images or symbols, each of which represents several concepts, ideas or subjects. Its keyboard can accommodate over 60 images. The keys bear symbols from daily life and can be customized to the needs and experiences of the user. Some symbolize linguistic functions; others denote activities. Still others stand for styles of speech and mood.

The Minspeak code is a meaning based code. It allows a person to define whole sentences by making two or three selections. A person using a Minspeak machine might have a sentence vocabulary (rather than a word vocabulary because Minspeak is based on the sentence) of 800 to 900 sentences. S/he can access a key every three seconds; nine seconds for the average sentence.

In Bruce Baker's words: "Minspeak has a modern linguistic



Bruce Baker.

coding system based on general ideas underlying human communication. The coding technique uses sequence to define context, thus exploiting the human mind's ability to process semantic information. Easy-to-understand symbols on each key represent ideas. The meaning of each key image changes according to the sequence in which it is hit. By combining these symbols, whole spoken sentences can be generated. The simplicity or complexity of the symbols will depend on the needs and abilities of the user.

The system is set up so that the user, with assistance, can make up his/her own keyboard according to prescribed semantic features. Thus ideally each user chooses symbols which reflect his/her individual needs, ideas and lifestyles.

The images on the keys mean different things in different contexts. For example, apple used in relationship to a person might mean 'eating'. Apple used in relation to a car might mean 'gasoline'. Another example, an image of a zebra when used with the dressing key could mean 'stripes'. When used in an eating context, it might mean 'meat'. When used in a transportation context, it might mean 'gallop'."

Practical Considerations and Potential of Minspeak

Perhaps the largest consideration for widespread distribution of Min-

speaking is cost. The price of the Minspeak embodiments range between \$3,000 to \$6,000 U.S. Until recently, according to Baker, lack of the effectiveness of communication aids caused agencies to question all aids as prostheses. This has limited the amount of private and public funding available for them.

Says Baker about this matter: "In the past, an insurance company that has paid thousands of dollars for a new wooden leg for a child every two years was reluctant to pay a much smaller one-time figure for a communication aid. They must realize that if one can't speak, one can't live independently." Because of the advances represented by Minspeak, a coordinated campaign has been launched (in the U.S.) to persuade private and public health care funding agencies to make funding available for this device.

Though Minspeak appears to require experienced guidance to be programmed properly, it has been designed for all levels of intelligence. Since its images can be custom programmed for the individual, the possibilities for both high

and low achievers are equal. It can be programmed for a college student or it can be used by someone with a limited intelligence level. Because of its emphasis on images rather than letters, it does not require the user to spell or read.

There has been some concern about the use of preprogrammed ideas used in the Minspeak system. Some think that the use of stereotypical sentences cut down on language use and creativity.

Baker replies to this consideration: "One makes a trade-off on specificity for fluency with Minspeak. The use of stereotypical sentences gets the user accustomed to the power of speech output. Rather than lowering creativity, the language experience that occurs through the rapid output of whole sentences will stimulate the user."

The potential for Minspeak? It is presently being fieldtested by several institutions including BCI, which is considering Minspeak's application to Blissymbolics. Recently there has also been an interest in the industrial applications of the system. This, Baker says would be a first: for a

computer program exclusively developed for the disabled, and partially developed by a disabled person, to be applied to the commercial market. But Baker's main concern is that Minspeak be further tested and perfected for those who really need it:

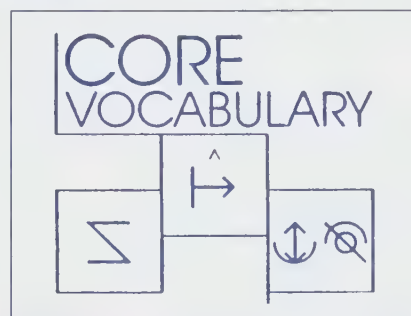
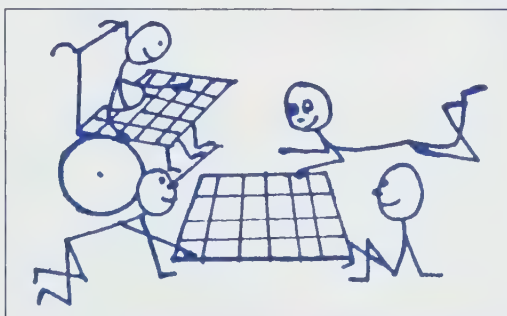
"People who hear and cannot speak have an enormous potential for contributing to society through their insights into human communication. It is my sincerest hope that Minspeak will give them access to modern technology that will enable them to make this contribution in an easier and more productive way." □

Editor's Note:

Several quotes used in this article first appeared in *Byte* magazine, September 1982.

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Research and Publications



Comparing Graphic Systems: Search for a Common Ground

by Geb Verburg



"Research and Publications" is written by Geb Verburg, who has been involved in the field of nonspeech communication since the mid-seventies. A cognitive scientist, Mr. Verburg is currently working as Research Associate in several OCCC research projects investigating the use of microcomputers, the development of software and assessment tools for control and mobility.

In the 17 years since Elizabeth Helfman published her book *Signs and Symbols Around the World*, the number of pictorial, iconic, pictographic, logographic and/or ideographic systems has increased phenomenally. Lloyd and Karlan (1984) list ten different systems or classes of what I will simply call graphic systems. Excluded from that term and from our present discussion are sign and gestural systems, traditional orthography, Braille and synthetic speech, not because developments in these systems have stood still but because I want to discuss issues pertaining to the comparison of graphic systems.

Much of the proliferation in graphic systems is directly correlated with the maturation of the augmentative communication field and with the wider recognition of the importance of communication. I like to believe that the attention being paid to graphics can be found in a much broader stratum of society than only that of those concerned with nonspeaking people. The push towards symbols and graphics represents a gentle rebellion against the powerful, sometimes inhibiting and always sequential (printed) word. I take the increasing use of graphics or icons in computer software as other evidence for this rebellion.

Whatever the cause, having this wealth of pictorial material available represents a benefit to whoever is in need of a nonverbal communication system for one's child or client. But at the same time, it presents a new problem, namely that of deciding just which graphic system is best for a particular child or client population. And that brings us to the comparison of graphic systems.

Comparing Graphic Systems

When conducting research that compares graphics systems there is one dangerous and inadequate question: Which system is best? It is dangerous because it presumes that there exists a system that is better than all other systems. This is rarely true. Furthermore the question is inadequate because it is incomplete. Better to ask for whom? in what respect? for what purpose? and by virtue of what evidence?

If we assume for a moment that one graphic system may be better for one type of client or for one stated communication purpose than another system, then comparisons are valid. However, it should be kept in mind that no single system may meet all the needs and capabilities of a client and that mixing and matching of systems may be necessary.

There are many different ways of comparing graphic systems and different purposes behind the comparisons. One method has been to devise a classification structure (e.g., Clark and Woodcock, 1976; Musselwhite and St. Louis, 1982) into which all systems can be slotted under appropriate categories (e.g., syllabic vs. logographic, representational symbol systems vs. symbolic language codes). This approach offers useful systematization but runs the risk of violating characteristics or properties of systems by fitting a system to the classification structure rather than the reverse.

Another approach follows from the practical need to select a system for a client. Here lists of issues, properties and requirements of the system and matching developmental or functional capabilities of the clients are presented (e.g., Chapman and Miller, 1980; Silverman, 1980; McNaughton and Kates, 1980; Lloyd and Karlan, 1984) in order to facilitate the choice of a system.

And then there are of course the comparisons of systems which compare symbols of one system against those of others in a descriptive or experimental context.

A Few Cautions

There are a few cautions that I would like to raise apropos of this latter type of comparison of graphic systems. The first and very general caution addresses two biases that are related to the relative tender age of most graphic systems. Because they are recent creations, the proprietary sentiments about graphic systems and subjective feelings for or against one or another system are still very strong. Furthermore, the number of service providers who have in fact worked with more than one or two systems, and who therefore intimately know several systems, is still very limited. Most published research on systems comparison to-date is carried out by the creators of one of the systems or by MA or PhD level students

who do not have long term first hand knowledge of all systems that are being compared. The former research risks being biased (in spite of the researchers' best intentions to the contrary) and the latter tends to overlook the finer points of all systems.

It can be expected that both of these shortcomings will disappear as the creators, service providers and researchers learn more about the strengths and weaknesses of different systems. In the meantime, when you read results about system comparisons it pays to keep this caution in mind.

The second caution pertains to conclusions that are drawn about systems on the basis of the comparison of only one or two of the systems' properties (e.g., iconicity, or ease of acquisition, or number of symbols in the system). Every graphic system has many properties and a difference on one or two of these does not necessarily mean that one can draw the conclusion that one system is better than the other. Such a conclusion must be qualified with regard to the properties compared. A more iconic system may for example be acquired faster than a less iconic one, but the less iconic system may have other advantages that would make it better suited for a particular use or client (e.g., its size). A research question that needs to precede comparative research is: What properties of graphic symbols match the requirements and capabilities of which client groups (e.g., young, low functioning, etc.) and/or communication purposes?

The third caution deals with the selection of the symbols from systems that are being compared. Most studies that compare graphic systems use a relatively small set of symbols from each system (10 percent or less). There are obvious practical reasons for this procedure and as long as the symbols are selected randomly, the results can be said to apply to the system as a whole (i.e., the results can be generalized). I have not yet seen a study where symbols were indeed drawn at random. Most studies hand-pick the symbols to be compared and in that case research methodological and statistical rules

forbid generalization to all symbols in the systems. The simple process of randomly selecting symbols can make the difference between drawing valid and general conclusions and drawing misleading conclusions. Here too a prior question lurks: What is the actual number of symbols to be drawn at random (i.e., the sample size). The answer to this question depends on the number and variety of symbols in the systems, and on all properties upon which symbols and systems may be compared.

An Approach to Systems Comparison

At the Blissymbolics Communication Institute, a group of people has embarked on a comparative study of graphic systems that is ambitious and promising. The goal of this study is to provide parents and symbol instructors with criteria (1) to compare individual graphic vocabulary items, and (2) to evaluate graphic communication systems and graphic vocabulary sets.

The authors/producers of symbol systems were approached with a request to participate in a multiple systems comparison in which all (published) symbols of several systems would be entered into a database. Authors were asked permission for including their system in the database. They were also asked to comment on their system in terms of its size, content and organization of vocabulary, nature of the graphic representation, type of communication that is facilitated by their system, availability of instructional and communication materials, knowledge required of the receiver and support provided to the instructor.

Creation of a database containing all symbols of Bliss, Picture Your Blissymbols, Picture Communication Systems (PCS), Picsym, PIC, Core Vocabulary and others was felt to be a useful means of comparing graphic systems. Such a base, once created, can be updated, modified and expanded, and can be analysed in many different ways. DBase II, a microcomputer oriented database system was selected as a tool and a list of properties ("fields") was compiled outlining what should go

in the base and how symbols in each system are to be entered, rated or classified. Much time and discussion went into the preparation of the "structure" of the database. This structure, although finalized to an extent, is still relatively open and amenable to change and/or expansion.

As a member of the BCI team, I have played an active role in guiding the construction of the database. In the next issue, I will present the structure of the database and the initial results. □

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Teaching and Learning



Total Communication At Christ Church Child Center

by Betty Schopmeyer

Betty Schopmeyer is a Speech-Language Pathologist for the Total Communication Program at Christ Church Child Center, Bethesda, Maryland. In the following article, she describes the total communication program in which she is involved at her center.

It is lunchtime. Six children in one of Christ Church Child Center's Total Communication classes are getting ready to eat. Following signed and verbal directions from the teachers, they set the table, get their lunches and bring milk from the refrigerator. Susan, a 9-year-old child with severe language problems and very little spontaneous communication, sets her communication board on the table. Pointing to her Blissymbols, she asks for her placemat, cup, napkin, sandwich and juice. Her teachers talk about how well she has learned symbols, when other means of communication have been unsuccessful. Now Susan sees a teacher pat another child on the head. She wants attention too. Before she can begin to tantrum, her usual way of seeking attention, the teacher directs her to her communication board and she is able to point to the symbol for "hug".

Next to Susan, Marie is asking for help in cutting up her fruit. She signs "I want help", but her signs and verbal approximations are poorly sequenced. Her teacher provides her with a sentence strip showing the Blissymbols for the words. With this cue, Marie is able to sequence her request correctly.

Eddie wants a cookie. A 9-year-old with virtually no speech, Eddie displayed no real communication or interaction with others before entering the Total Communication Program last fall. By using Blissymbols

for rote phrases such as "I want _____", Eddie began to understand what language was all about. In a few months, he progressed from reading symbols and signing the words in a very structured situation, to using sign language spontaneously to ask for food, toys and activities. Now he signs, "I want cookie."

When he has finished his cookie, he comes to a teacher and asks for a chair. A little puzzled, the teacher signs, "Okay." But why does he want a chair? The answer becomes clear when Eddie, a big smile on his face, carries the chair over to another table where Kevin is doing a puzzle. He joins his friend, watching him with great interest. The teachers look at each other, delighted with this new sign of Eddie's progress in language and social interaction.

The Total Communication Program at Christ Church Child Center was begun three years ago because of four children with extremely limited verbal ability whose needs could not be met through more conventional methods of teaching the language/learning impaired. An elementary workshop in Blissymbolics was given at the school in August 1980, and many of the staff members were trained at that time. Christ Church Child Center was founded in 1961 by Mrs. Shari Gelman and has served learning

disabled and multihandicapped children in the Washington, DC area since then. With the addition of Blissymbols and sign language training, a new facet of the school's already diversified program became possible.

The program today has expanded to 12 children in two classes. Their handicaps include autistic-like characteristics, poor muscular control, cerebral palsy and genetic disorders. All have great needs in the area of receptive and expressive language. Sign language is used at all times by the teachers and therapists. Blissymbols are also used with a majority of the children. The staff works as a team, with each teacher responsible for an area of instruction, so that the children receive daily small group work in language, reading, gross motor skills and visual perception/fine motor skills. In addition, language therapy, occupational therapy and physical therapy are strong components of the program. Everyone works together to provide an integrated, unit-based approach to learning.

During a recent clothing unit, the reading teacher constructed her own symbol books containing such phrases as "I wear _____" and "I have _____" and many labels for articles of clothing. The language teacher concentrated on concepts dealing with clothing (hat on boy,



Caroline Lee matching symbol to object during reading group activity.

dress in drawer, big shirt, little shirt) and the motor teachers worked on self-help skills involving dressing. The language therapists provided input and classroom activities dealing with sequential expression (steps in washing and folding clothes), more concepts (wet, dry, dirty, clean) and additional related vocabulary. At the conclusion of the unit, the children knew many signs, could use them in functional contexts and could read the symbol vocabulary. Those with communication boards had acquired a new category of words to use with others. Even the music therapist helped by composing simple songs about clothing and teaching the children to sign them.

Unexpected benefits have resulted from the introduction of signing and Blissymbols to the Christ Church Child Center program. Some verbal children with severe reading problems mastered a symbol vocabulary and for the first time had some success at decoding written material. Others who had difficulty learning certain language concepts, such as prepositions, were able to cue in to the ideographic nature of symbols and use this to help them sort out the confusing spatial relations. And recently the school entered the computer age with the addition of an Apple computer and the Blissapple program.

For children such as Susan and Eddie, the Total Communication program has made the difference between communicating with the world and remaining apart from it. Their language skills are still at a low level, and may always be, but something significant has happened during this school year. Communication has begun.

A few months ago, when Eddie had been in Total Communication for about 6 months, the language therapist came to get him for individual therapy. As she entered the room, Eddie looked up and signed, "Eddie turn, Mrs. S." And he held out his hand and smiled. □

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Number of Utterances of Each Type		
	Manual Signing	Bliss
Repetition	8	4
Social Responses	4	—
Answering Questions — same medium	14	7
— other medium	1	14
Naming	2	3
Picture Description	10	12
Requesting	20	4
Disagreement	1	—
Questioning — implied	2	1
— question words	—	—
Spontaneous Comments/Reporting	30	55
Joking/Teasing	3	1
Total Number of Utterances	95	101

One might conjecture that signing is selected for requests so that they can be signalled quickly while the receiver's attention is held. However, the more complex information conveyed in spontaneous reporting may be easier in Blissymbols where the vocabulary is recognized rather than recalled.

The profile also highlighted the number of times that the user alternated between two mediums within one utterance. These seemed to sub-divide into confirming (repeating an item in the alternative mode) and mixed medium (where units of an utterance alternated between the two systems). Further analysis showed that there was a considerably higher incidence of moving from sign into Bliss than vice versa (16:9).

What parts of speech are used in the two systems and are the usages parallel?

One problem here is that a sign or symbol may not always be used

according to the classification under which it was taught. For example, the symbol "snow" from the noun portion of the Bliss chart was used in one instance to mean "cold". As might be expected the largest group in both systems were nouns, followed by adjectives and then verbs. The more permanent visual system, Blissymbols, was preferred for the more static visual concepts, nouns (146:58) and adjectives (78:39), while the dynamic system, signing, was preferred for verbs (20:6).

This seems to give useful pointers for teaching purposes. Some of the more pictorial Blissymbol nouns facilitate the teaching of manually signed nouns, while signed verbs facilitate the teaching of Bliss action symbols.

How many signs or symbols are being strung together?

Here again there is a clear difference. Manual signing was preferred for short spontaneous remarks and Blissymbols for longer

more complex utterances.

There were 81 single sign utterances and the maximum number of signs strung together were four. In Blissymbolics, there was a much larger number of multiple symbol utterances, the longest utterance containing nine symbols. The nature of the communication mode seems to be important here. The permanently displayed vocabulary on the Blissymbol chart made it easier to compose longer word strings. Another factor to be considered is that it is often possible to convey two or more words with one sign.

It is not possible to make direct comparison between aspects of the two systems and it is certainly not wise to draw conclusions from the findings of one particular case. The profiles do however serve to highlight certain points which have been useful in the teaching of a combined sign and symbol program. □

**See Communicating Together, Vol. 1, No. 4, Fall 1983.*



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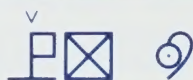


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International News



Fighting Back: The Headstart for Oliver Program

by Sally Millar

Sally Millar is a speech pathologist at the CALL Centre, University of Edinburgh, Scotland. She is editor of the Blissymbolics Communication Resource Centre (UK) Newsletter, and wrote the following review of the book Fighting Back which appeared in the July 1984 issue. Although the book is slanted towards the services and educational programs available in the United Kingdom, its message is relevant to those involved in augmentative communication in all parts of the world.

Fighting Back is a small 45 page book written by Phillip and Jackie Medhurst, the parents of Oliver. Oliver was brain-damaged and multiply-handicapped following a road-traffic accident when he was eight years old.

The book describes Oliver's disabilities, his remaining abilities, his needs and his potential for development and education with impressive insight and detailed objective analysis. An individualized program is outlined which targets core areas of a curriculum for Oliver. These core areas are based on the Walsall Curriculum (J. Murphy, *Teaching the Multiply Handicapped*, Walsall Education Department, 1980). and include basic self-help skills, physiotherapy, stimulation, play, communication, environmental control.

Implementation of the program involves precision teaching, including task analysis, appropriate diagnostic, reassessment and monitoring techniques, and establishment of aims and methods. Materials and techniques are described in detail. Using their own child as an example, the authors stress the resources and the co-ordination of effort required to put this program into operation. The book gives a survey

of some of the resources available to a nonspeaking child, and this includes technology for communication.

This book will certainly be of interest to those involved with the physically and multiply-handicapped and with Blissymbolics. The therapeutic and educational structures and techniques discussed are both imaginative and systematic. Within the authors' terms of reference, they are realistic, practical and concrete. But they are aimed at ideal practice and make no concession to limitations of staff, time or money. The authors are clearly highly conversant with advanced educational principles, and they are integrating this knowledge with their commitment, love and demands as parents.

But this book is much more than a parental account of the struggles faced by a family smitten by disability. It is much more than a curriculum model and an educational/therapeutic program. *Fighting Back* is a gauntlet, thrown down in challenge to the politicians who hold power over funding, to the administrators of health boards, education departments and social services, and to the professionals, doctors, teachers and therapists, who are responsible for devising and implementing programs for children such as Oliver.

Oliver is fighting his way back to independence and fulfillment. His parents are fighting back against ignorance, uncaring and the false



Oliver Medhurst.

values of expediency and cost-cutting. Without ever criticising existing individuals or services, without anything but positive, constructive ideas, what the Medhursts *don't* say about the current situation in our special schools and hospitals speaks volumes. □

Editor's Note:

To obtain this book, please send £2.00 (sterling funds) per copy (includes post and packing). Cheques should be made out to "Phillip and Jackie Medhurst". The Oliver Medhurst Appeal Fund, c/o 42a Hobson Road, Leicester, England, U.K. LE4 2AQ.

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Now I Can Speak demonstrates how successful Communication can become between the Blissymbol user and receiver.

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Schedule of Events



BCI Elementary Workshops

BCI Elementary Workshop training sessions are held throughout the year and provide professionals and families with an opportunity to learn about Blissymbolics. The workshops include 30 hours of lectures, and group and individual assignments.

Forthcoming Workshops:

In Ontario

- March 5-7, 1985 in Toronto with optional day March 8 presented by the Augmentative Communication Service.
- July 2-4, 1985 in Toronto (optional day July 5).
- Oct. 8-10, 1985 in Toronto (optional day October 11).

1984-85 Trace Center Workshop Schedule

Selection and Application of Microcomputers for Handicapped Individuals

In California

- February 22-23, 1985 at Apple Computer, Cupertino, California, U.S.A.

In Maryland

- March 22-23, 1985 at United Cerebral Palsy of Montgomery Co. Inc., Rockville, Maryland, U.S.A.

Development of Communication and Interaction in Nonvocal Children and Adults

In Utah

- April 19-20, 1985 at Utah State University, Logan, Utah, U.S.A.

Content and Schedule Questions for All Workshops:

Workshop Coordinator, University of Wisconsin, Trace Research and Development Center, 314 Waisman Center, 1500 Highland Avenue, Madison, Wisconsin 53705, U.S.A.
Telephone: (608) 262-6966.

Readers Write



Dear Communicating Together,

It would be beneficial to organizations like ours whose clients are adults to have information specifically for adults, such as:

- programs for adults who use Bliss
- differences between the adult and child users
- techniques used for teaching adults

I realise the enormous job you people have in working with children, but children grow up, and eventually end up in places like our Participation House. It would be nice to know that children who once were at your centre were receiving a quality service in their adult lives in programs like ours. It would be great if organizations could hook up and have similar goals for the entire life of the disabled person.
Just a thought.

Jeff Schissler
Participation House
Durham Region Inc.
Oshawa, Ontario

Editor's Note:

We would be happy to hear from anyone involved in adult programs.

For Your Information

The Blissymbol components used in section headings and design are shown here with accompanying words.

person 	self 	public 	woman 	man 	family 	life 	month
(to) advance 	(to) share 	(to) teach 	(to) learn 	(to) read 	(to) write 	hello 	goodbye
(to) communicate 	science 	knowledge 	opinion 	event 	idea 	(to) help, aid 	Blissymbol
machine 	computer 	thing 	schedule 	paper, page 	book 	plural indicator 	combine indicator
question 	international 	news 	in, inside 	country, state 	(to) be 	from 	command

Answers to Symbol Quiz (from p.10)

1. lamp
2. being, creature
3. ruler
4. aid, support
5. linear thing

For a better understanding of all of the component parts within Blissymbols, the reference *Blissymbols for Use*, B. Hehner, 1980, is highly recommended.

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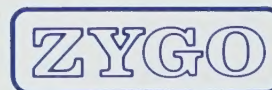
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